REMARKS

Applicant respectfully requests reconsideration of the present application in view of the reasons that follow. Claims 1, 2, 4-10, and 12 have been rejected. No claims are amended, and no new matter has been added. Claims 1, 2, 4-10, and 12 will therefore remain pending in this application upon entry of this Reply and Amendment.

The Applicant notes that the Examiner's statements presented in the Advisory Action are addressed below.

Claim Rejections – 35 U.S.C. § 103

1. Claims 1-2 and 10

On page 2 of the final Office Action, the Examiner rejected Claims 1-2 and 10 as being obvious over German Patent No. DE 33 30 823 A1 titled "Closing Plug for an Accumulator" to Krabatsch et al. ("Krabatsch et al.") under 35 U.S.C. § 103(a).

The Examiner stated:

> With respect to claims 1 and 2, Krabatsch et al. discloses a plug for an accumulator "battery." The plug has degassing openings 9 and 19 and 18 (see Figure).
>
> Krabatsch et al. teaches an upper part 21 with opening 18 to the outside and a lower part 7 (see Figure). Opening 18 is also connected to the splash basket 7 (see Figure).
>
> Krabatsch et al. teaches an acid cage 7 "splash basket" having an inner diameter that increases from the free end to the upper end of the acid cage and slots continuing as far as the free end of the splash basket (see Figure) (See page 2 line 1-10).
>
> With respect to the shape of the slots, Krabatsch et al. does not specifically teach wherein each of the slots has a width that broadens with increasing distance from the free end of the splash

> basket. Unless applicant shows criticality for the claimed features, changes in size and shape is obvious absent a showing of unexpected results.
>
> It is noted that applicant's slot widths and basket shape appear to be similar, if not identical, to that shown in the Figure in DE 3330823.
>
> With respect to slots including a free end extending toward the free end of the splash basket, Krabatsch et al. teaches that feature 10 of the plug is an opening.
>
> Since, there is no showing of unexpected results or showing of criticality of the end of Applicant's slots being free as claimed by the Applicant as opposed to the slots of Krabatsch et al. having lower edge support 24 at the end of the slots of Krabatsch et al., the plug of Applicant is obvious variant of the plug of Krabatsch et al.

Krabatsch et al. is directed to a "Closing Plug for an Accumulator" and discloses a member 11 having circumferential slots that are bounded at one end by another member 24, which is shown in Figure 1 to be a ring-like member.

Claim 1 is in independent form and recites a "rechargeable battery" comprising, in combination with other elements, a "plurality of plates defining slots…each of the slots continuing as far as a free end of the splash basket." Claims 2 and 10 depend from independent Claim 1.

The "rechargeable battery" recited in independent Claim 1 would not have been obvious in view of Krabatsch et al. under 35 U.S.C. § 103(a). Krabatsch et al. does not disclose, teach or suggest a "rechargeable battery" comprising, in combination with other elements, a "plurality of plates defining slots…each of the slots continuing as far as a free end of the splash basket." In contrast, the slots in Krabatsch et al. do not extend as far as the free end of the splash basket 13 of the present disclosure. Instead, Krabatsch et al. discloses a ring-like member 24 at the end of the slots that interrupts the slots such that they do not extend as far as the free end (see Krabatsch et al. at Figure 1).

On page 2 of the Action Advisory, the Examiner further stated:

> With respect to Applicant's argument that the slots in Krabatsch et al. do onto extend as far as the free end of the splash basket 13 of the present disclosure and that a ring member 24 at the end of the slots interrupts the slots such that they do not extend as far as the free end. Examiner notes that Applicant has not shown unexpected results or criticality for the end of Applicant's slots being free therefore the plug of Applicant is an obvious variant of the plug as disclosed by Krabatsch et al. Examiner also notes that without the oring 24 of Krabatsch et al. being present would save material costs in the plug of Krabatsch et al.

The Applicant respectfully disagrees. As described, for example, in paragraphs [0015] and [0016], the "continuous slots" allow a sealing plug to be "inserted obliquely into the cover of a rechargeable battery . . . owing to the flexibility provided for the splash basket by means of the continuous slots" and "allows the sealing plug to be inserted into the cover via the openings even without being centered exactly." Such an advantageous feature is not appreciated or disclosed by Krabatsch et al., where the circumferential slots are bounded at one end by a ring-like member 24 (thus preventing the flexibility that is advantageously provided by the "slots continuing as far as a free end of the splash basket" as recited in Claim 1).

To transform the "closing plug for an accumulator" of Krabatsch et al. into a "rechargeable battery" (as recited in Claim 1) would require still further modification, and such modification is taught only by the Applicant's own disclosure.

The "rechargeable battery" recited in independent Claim 1, considered as a whole, would not have been obvious in view of Krabatsch et al. The rejection of Claim 1 over Krabatsch et al. under 35 U.S.C. § 103(a) is improper. Therefore, Claim 1 is patentable over Krabatsch et al.

Dependent Claims 2 and 10, which depend from independent Claim 1, are also patentable. See 35 U.S.C. § 112 ¶ 4.

The Applicant respectfully requests withdrawal of the rejection of Claims 1-2 and 10 under 35 U.S.C. § 103(a).

2. Claims 4-7 and 12

On page 4 of the Office Action, the Examiner rejected Claims 4-7 and 12 as being obvious over Krabatsch et al. in view of U.S. Patent No. 4,201,647 titled "Measuring Electrodes and Process " to Spaziante et al. ("Spaziante et al.") under 35 U.S.C. § 103(a).

The Examiner stated:

> With respect to claims 4 and 12, Krabatsch et al. discloses a plug for an accumulator "battery." The plug has degassing openings 9 and 19 and 18 (see Figure).
>
> Krabatsch et al. teaches an upper part 21 with opening 18 to the outside and a lower part 7 (see Figure). Opening 18 is also connected to the splash basket 7 (see Figure).
>
> Krabatsch et al. teaches an acid cage 7 "splash basket" having an inner diameter that increases from the free end to the upper end of the acid cage and slots continuing as far as the free end of the splash basket (see Figure) (See page 2 line 1-10).
>
> With respect to the shape of the slots, Krabatsch et al. does not specifically teach wherein each of the slots has a width that broadens with increasing distance from the free end of the splash basket. Unless applicant shows criticality for the claimed features, changes in size and shape is obvious absent a showing of unexpected results.
>
> It is noted that applicant's slot widths and basket shape appear to be similar, if not identical, to that shown in the Figure in DE 3330823.
>
> With respect to slots including a free end extending toward the free end of the splash basket, Krabatsch et al. teaches that feature 10 of the plus is an opening.

> Since, there is no showing of unexpected results or showing criticality of the end of Applicant's slots being free as claimed by the Applicant as opposed to the slots of Krabatsch et al. having lower edge support 24 at the end of the slots of Krabatsch et al., the plug of Applicant is obvious variant of the plug of Krabatsch et al.

However, the Examiner acknowledged:

> Krabatsch et al. does not disclose at lease one of as state of change indicator and acid level indicator attached to the upper part of the sealing plug and passing through the lower part of the sealing plug cavity.

The Examiner stated:

> Spaziante et al. discloses measuring electrodes and process (title) wherein, considering the discharging voltage characteristics of a lead battery, it is evident that the voltage determination cannot give a reliable indication of the charge condition of the battery since even near full discharge the voltage is almost the same as that of a fully charged battery. A reliable method to assess the charge condition is to measure the acid concentration (Col 2 lines 4-20). Spaziante et al. also teaches that in FIG. 3, the assembly is comprised of a measuring electrode M, a counter-electrode C for activating the measuring electrode M by anodic polarization of the same in an acidic or basic solution and a reference electrode R (Col 6 lines 5-16). The measuring assembly constituted by the three electrodes placed in the electrolyte of the battery is moreover useful in detecting and eventually signaling the lowering of the level of the electrolyte below the recommended minimum (Col 9 lines 45-65) (see Fig. 3).

The Examiner concluded:

> Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the battery level/charge indicator of Spaziante et al. into the battery plug of Krabatsch et al. because Spaziante et al. teaches that the measuring assembly constituted by the three electrodes placed in the electrolyte of the battery is moreover useful in detecting and eventually signaling the lowering of the level of the electrolyte below the recommended minimum (Col 9 lines 45-65).

Spaziante et al. is directed to "Measuring Electrodes and Process" and discloses a process where an "electrode is utilized for determining the charge conditions of a battery" (see column 4, lines 59-60).

Claim 4 is in independent form and recites a "rechargeable battery" comprising, in combination with other elements, a "plurality of plates defining slots…the slots continuing as far as a free end of the splash basket." Claims 5-7 depend from independent Claim 4.

The "rechargeable battery" recited in independent Claim 4 would not have been obvious in view of Krabatsch et al., alone or in any proper combination with Spaziante et al., under 35 U.S.C. § 103(a). Krabatsch et al., alone or in any proper combination with Spaziante et al., does not disclose, teach or suggest a "rechargeable battery" comprising, in combination with other elements, a "plurality of plates defining slots…the slots continuing as far as a free end of the splash basket." In contrast, the slots in Krabatsch et al. do not extend as far as the free end of the splash basket 13 of the present disclosure. Instead, Krabatsch et al. discloses a ring-like member 24 at the end of the slots that interrupts the slots such that they do not extend as far as the free end (see Krabatsch et al. at Figure 1).

The "slots continuing as far as a free end of the splash basket" recited in Claim 4 advantageously allow a sealing plug to be "inserted obliquely into the cover of a rechargeable battery . . . owing to the flexibility provided for the splash basket by means of the continuous slots" and "allows the sealing plug to be inserted into the cover via the openings even without being centered exactly" (see, e.g., paragraphs [0015] and [0016] of the present specification). Such an advantageous feature is not appreciated or disclosed by Krabatsch et al., where the circumferential slots are bounded at one end by a ring-like member 24.

To transform the "closing plug for an accumulator" of Krabatsch et al. and the "measuring electrodes and process" of Spaziante et al. into a "rechargeable battery" (as recited in Claim 4) would require still further modification, and such modification is taught only by the Applicant's own disclosure. The suggestion to make the combination of Krabatsch et al. and

Spaziante et al. has been taken from the Applicant's own specification (using hindsight), which is improper.

The "rechargeable battery" recited in independent Claim 4, considered as a whole, would not have been obvious in view of Krabatsch et al. and/or Spaziante et al. The rejection of Claim 4 over Krabatsch et al. in view of Spaziante et al. under 35 U.S.C. § 103(a) is improper. Therefore, Claim 4 is patentable over Krabatsch et al. in view of Spaziante et al.

Dependent Claims 5-7, which depend from independent Claim 4, are also patentable. See 35 U.S.C. § 112 ¶ 4.

The Applicant respectfully requests withdrawal of the rejection of Claims 4-7 under 35 U.S.C. § 103(a).

Claim 12 is in independent form and recites a "sealing plug" comprising, in combination with other elements, a "plurality of plates defining slots…wherein the slots continue as far as a free end of the splash basket."

The "sealing plug" recited in independent Claim 12 would not have been obvious in view of Krabatsch et al., alone or in any proper combination with Spaziante et al., under 35 U.S.C. § 103(a). Krabatsch et al., alone or in any proper combination with Spaziante et al., does not disclose, teach or suggest a "sealing plug" comprising, in combination with other elements, a "plurality of plates defining slots…wherein the slots continue as far as a free end of the splash basket." In contrast, the slots in Krabatsch et al. do not extend as far as the free end of the splash basket 13 of the present disclosure. Instead, Krabatsch et al. discloses a ring-like member 24 at the end of the slots that interrupts the slots such that they do not extend as far as the free end (see Krabatsch et al. at Figure 1).

The "slots" that "continue as far as a free end of the splash basket" recited in Claim 12 advantageously allow a sealing plug to be "inserted obliquely into the cover of a rechargeable battery . . . owing to the flexibility provided for the splash basket by means of the continuous

slots" and "allows the sealing plug to be inserted into the cover via the openings even without being centered exactly" (see, e.g., paragraphs [0015] and [0016] of the present specification). Such an advantageous feature is not appreciated or disclosed by Krabatsch et al., where the circumferential slots are bounded at one end by a ring-like member 24.

To transform the "closing plug for an accumulator" of Krabatsch et al. and the "measuring electrodes and process" of Spaziante et al. into a "sealing plug" (as recited in Claim 12) would require still further modification, and such modification is taught only by the Applicant's own disclosure. The suggestion to make the combination of Krabatsch et al. and Spaziante et al. has been taken from the Applicant's own specification (using hindsight), which is improper.

The "sealing plug" recited in independent Claim 12, considered as a whole, would not have been obvious in view of Krabatsch et al. and/or Spaziante et al. The rejection of Claim 12 over Krabatsch et al. in view of Spaziante et al. under 35 U.S.C. § 103(a) is improper. Therefore, Claim 12 is patentable over Krabatsch et al. in view of Spaziante et al.

The Applicant respectfully requests withdrawal of the rejection of Claim 12 under 35 U.S.C. § 103(a).

3. Claims 8-9

On page 8 of the Office Action, the Examiner rejected Claims 8-9 as being obvious over Krabatsch et al. in view of U.S. Patent No. 6,733,921 titled "Rechargeable Electric Battery" to Richter et al. ("Richter et al.") under 35 U.S.C. § 103(a).

The Examiner stated:

> With respect to claim 8, Krabatsch et al. discloses a plug for an accumulator "battery." The plug has degassing openings 9 and 19 and 18 (see Figure).

> Krabatsch et al. teaches an upper part 21 with opening 18 to the outside and a lower part 7 (see Figure). Opening 18 is also connected to the splash basket 7 (see Figure).
>
> Krabatsch et al. teaches an acid cage 7 "splash basket" having an inner diameter that increases from the free end to the upper end of the acid cage and slots continuing as far as the free end of the splash basket (see Figure) (see page 2 line 1-10).
>
> With respect to the shape of the slots, Krabatsch et al. does not specifically teach wherein each of the slots has a width that broadens with increasing distance from the free end of the splash basket. Unless applicant shows criticality for the claimed features, changes in size and shape is obvious absent a showing of unexpected results.
>
> It is noted that applicant's slot widths and basket shape appear to be, if not identical, to that shown in the Figure in DE 3330823.
>
> With respect to the slots including a free end extending toward the free end of the splash basket, Krabatsch et al. teaches that feature 10 of the plug is an opening.
>
> Since, there is no showing of unexpected results or showing of critically of the end of Applicant's slots being free as claimed by the Applicant as opposed to the slots of Krabatsch et al. having lower edge support 24 at the end of the slots of Krabatsch et al., the plug of Applicant is obvious variant of the plug of Krabatsch et al.

However, the Examiner acknowledged:

> Krabatsch et al. does not specifically teach that the sealing plug is formed from an electrically conductive plastic.

The Examiner stated:

> Richter et al. disclosed a rechargeable electric battery (title) wherein a rechargeable electric battery including a plate block arranged in a plastic block box, positive and negative electrodes located in the box and electrically isolated by separators and conductively connected by sulfuric acid electrolyte, a cover for the box which has closure plugs and/or acid state indicators fitted in a gas-tight manner to openings therein, wherein at least a portion of

> an inner surface of the battery is electrically conductive or is provided with an electrically conductive layer, beginning in an area of a sealing seat of the closure plug or of the acid state indicator, and is electrically conductively connected to the electrolyte (Col 2 lines 35-47). Richter et al. also teaches that the electrical connection between closure plug and acid is provided by immersing the lower part of the plug into the electrolyte or via parts of the rechargeable battery which provide an electrical connection to the acid, or via an active capillary wick which effects the connection to the electrolyte (Col 4 lines 10-20).
>
> With respect to the sealing plug formed from electrically conductive plastic, Richter et al. teaches that the plug can be composed of, for example, corrosion resistant metal, conductive plastic, carbon (graphite, pyrolytic carbon), plastic doped with carbon powder or carbon fibers or conductive ceramic material (Col 3 lines 60-67).

The Examiner concluded:

> Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the conductive plastic material of Richter et al. as sealing plug material in Krabatsch et al. because conductive plastic material is resistant to the corrosive internal environment of batteries.

Richter et al. is directed to a "Rechargeable Electric Battery" and discloses a "splash basket 5 which projects into the cell and prevents acid splashes entering the interior of the plug" (see column 4, lines 25-28).

Claim 8 is in independent form and recites a "rechargeable battery" comprising, in combination with other elements, a "plurality of plates defining slots…the slots continuing as far as a free end of the splash basket." Claim 9 depends from independent Claim 8.

The "rechargeable battery" recited in independent Claim 8 would not have been obvious in view of Krabatsch et al., alone or in any proper combination with Richter et al., under 35 U.S.C. § 103(a). Krabatsch et al., alone or in any proper combination with Richter et al., does not disclose, teach or suggest a "rechargeable battery" comprising, in combination with other

elements, a "plurality of plates defining slots…the slots continuing as far as a free end of the splash basket." In contrast, the slots in Krabatsch et al. do not extend as far as the free end of the splash basket 13 of the present disclosure. Instead, Krabatsch et al. discloses a ring-like member 24 at the end of the slots that interrupts the slots such that they do not extend as far as the free end (see Krabatsch et al. at Figure 1).

The "slots continuing as far as a free end of the splash basket" recited in Claim 8 advantageously allow a sealing plug to be "inserted obliquely into the cover of a rechargeable battery . . . owing to the flexibility provided for the splash basket by means of the continuous slots" and "allows the sealing plug to be inserted into the cover via the openings even without being centered exactly" (see, e.g., paragraphs [0015] and [0016] of the present specification). Such an advantageous feature is not appreciated or disclosed by Krabatsch et al., where the circumferential slots are bounded at one end by a ring-like member 24.

To transform the "closing plug for an accumulator" of Krabatsch et al. and the "rechargeable electric battery" of Richter et al. into a "rechargeable battery" (as recited in Claim 8) would require still further modification, and such modification is taught only by the Applicant's own disclosure. The suggestion to make the combination of Krabatsch et al. and Richter et al. has been taken from the Applicant's own specification (using hindsight), which is improper.

The "rechargeable battery" recited in independent Claim 8, considered as a whole, would not have been obvious in view of Krabatsch et al. and/or Richter et al. The rejection of Claim 8 over Krabatsch et al. in view of Richter et al. under 35 U.S.C. § 103(a) is improper. Therefore, Claim 8 is patentable over Krabatsch et al. in view of Richter et al.

Dependent Claim 9, which depends from independent Claim 8, is also patentable. See 35 U.S.C. § 112 ¶ 4.

The Applicant respectfully requests withdrawal of the rejection of Claims 8-9 under 35 U.S.C. § 103(a).

* * *

It is submitted that each outstanding objection and rejection to the Application has been overcome, and that the Application is in a condition for allowance. The Applicants request consideration and allowance of all pending claims.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Please direct all correspondence to the undersigned attorney or agent at the address indicated below.

Respectfully submitted,

Date: April 25, 2008

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